

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of)	
)	
New Part 4 of the Commission's Rules)	ET Docket No. 04-35
Concerning Disruptions to Communications)	
)	

To: The Commission

PETITION FOR PARTIAL STAY

Syniverse Technologies, Inc. ("Syniverse"), pursuant to Sections 1.41 and 1.43 of the Commission's rules, hereby requests the Commission to stay the provisions of paragraphs 148 and 149 of the *Report and Order and Further Notice of Proposed Rulemaking*¹ in the above-referenced proceeding, as embodied in the first four sentences of Section 4.9(e) of the Commission's Rules, to the extent that such rules require Signaling System 7 ("SS7") providers to report outages based on blocked or lost calls or MTP messages. Specifically, Syniverse seeks to limit outage reporting requirements applicable to SS7 to reporting the occurrence of isolation of STPs and signaling end points pending disposition of Syniverse's Petition for Reconsideration to be filed within the next several days.

Syniverse is a global supplier of interoperability solutions to more than 300 telecommunications operators throughout North America, Latin America, Asia-Pacific and Europe. Syniverse's offerings include SS7 services, intelligent network services, database services, fraud and carrier access billing solutions, and other service bureau applications.

¹ *New Part 4 of the Commission's Rules Concerning Disruptions to Communications*, ET Docket No. 04-35, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 04-188 (rel. Aug. 19, 2004) ("R&O").

Syniverse participated in the rulemaking proceeding leading to the *R&O* and so its standing to request the stay relief is clear.

As the Commission recognized in the *R&O*, SS7 providers like Syniverse that do not provide service directly to end users have not previously been required to report any outages to the FCC, and even those SS7 companies currently subject to outage reporting requirements (the carriers who own and operate their own SS7 networks) have not previously been subject to threshold reporting criteria based on blocked or lost SS7 messages.² Based on the record in the proceeding, the Commission found that third-party SS7 providers should have to report an outage if the outage is big enough so that one or more affected carriers would also have to report; it concluded that having both the third party SS7 providers report as well as the affected communications service providers will help it to understand underlying vulnerabilities in these interconnected signaling networks.³ Notwithstanding the concerns voiced by third party providers like Verisign and Syniverse about their ability to determine meaningful data on “lost calls” or “lost MTPs,” the Commission adopted new Section 4.9(e) creating significant threshold criteria for the reporting of outages by SS7 providers.⁴

As will be explained in Syniverse’s forthcoming Petition for Reconsideration, the outage reporting requirements adopted for third party SS7 providers based on blocked or lost calls⁵ will

² *R&O* at ¶144.

³ *Id.* at ¶148.

⁴ Specifically, Section 4.9 requires outage reporting under the following circumstances: (1) an outage of at least 30 minutes consisting of 90,000 blocked calls based on real-time traffic data or 30,000 lost calls based on historic carried loads, (2) if the number of blocked calls cannot be directly estimated, then SS7 providers are to use 500,000 real-time lost MTP messages as a surrogate for 90,000 real-time blocked calls, or 167,000 lost MTP messages on an historical basis as a surrogate for 30,000 lost calls based on historic carried loads, and (3) whenever a pair of STPs serving any communications provider becomes isolated from a pair of interconnected STPs that serve any other communications provider, for at least 30 minutes.

⁵ See new Section 4.9(e), 47 C.F.R. Section 4.9(e); *R&O* at p. 96.

be difficult if not impossible to meet. Furthermore, use of lost MTP messages as a surrogate for blocked or lost calls would not provide the Commission with accurate outage information. Finally, as a third party provider of SS7 service, Syniverse does not have the same degree of access to communications networks as compared to its carrier customers, and thus is unable to gather and maintain reliable and accurate historic carried load data. Syniverse therefore will be requesting that, on reconsideration, the Commission retain only that portion of the requirements that is based on reporting instances where Syniverse's carrier customers become isolated from a signaling perspective.

As demonstrated below, the instant request for the limited stay of only portions of the new requirement satisfies all four factors to be considered in granting a stay. First, Syniverse is likely to succeed on the merits; second, there is a strong likelihood of irreparable injury absent relief; third, there is an absence of substantial harm to third parties if the stay is granted; and lastly, the public interest will be best served by granting the stay.⁶ Each is addressed below.

I. SYNIVERSE IS LIKELY TO SUCCEED ON THE MERITS.

The newly adopted reporting requirements can be broken down into reporting based on blocked or lost calls (using historic load data), lost MTP messages (also using historic load data), and isolation of STPs. However, as a third party provider of SS7 services, as distinguished from a communications carrier, requiring Syniverse to report outages based on blocked or lost calls or lost MTP messages puts Syniverse in the unenviable position of being unable to comply with the reporting requirements or being unable to guarantee the accuracy and thus the usefulness of the data it would need to collect and use to report an outage. In either case, the requirement will not

⁶ See *Virginia Petroleum Jobbers Ass'n v. FPC*, 259 F.2d 921, 925 (D.C. Cir. 1958).

serve any useful purpose in furthering the Commission's stated goal to "to understand underlying vulnerabilities in these interconnected signaling networks."⁷

Syniverse does not have the means to report blocked calls as required under Section 4.9(e). In contrast to its carrier customers, Syniverse has a much more limited view of network failures outside of its SS7 facilities. As a third party provider of SS7 service, Syniverse does not own, does not control, and has no monitoring capabilities with respect to, its carrier customer switches. Indeed, in most instances, carriers have redundant facilities used to complete calls in the event that the Syniverse SS7 network is unavailable, so the fact that Syniverse is unable to provide SS7 capabilities will not typically translate into "blocked calls." Syniverse does not generate network traffic, does not have any relationship with the carriers' customers, and thus cannot control or identify the call originations. Because there is no direct relationship between the use of Syniverse's third party SS7 network and blocked calling, it follows that Syniverse cannot independently ascertain whether a call has been blocked and thus whether the threshold for filing an outage report based on the number of blocked calls has been reached. On reconsideration then, the FCC is likely to determine that this criterion should not be applied to third party SS7 network services providers.

Indeed, Section 4.9(e) explicitly acknowledges that SS7 providers may not have the means to directly estimate the number of blocked calls. Thus, as an alternative, the rule requires SS7 providers to use "500,000 real-time lost MTP messages as a surrogate for 90,000 real-time blocked calls, or 167,000 lost MTP messages on a historical basis as a surrogate for 30,000 lost

⁷ R&O at ¶148.

calls based on historic carried loads.” The surrogate amount of MTP messages contained in the rule is an estimate derived from lost ISUP messages.⁸

Syniverse certainly agrees that since there are many different types of signaling services traversing the same signaling links, it would be very difficult to distinguish ISUP-specific messaging. At the same time, however, MTPs can include messages other than ISUPs that are unrelated to detecting the likelihood of “lost” calls. As a consequence, outage reports triggered by the surrogate amounts of lost MTP messages are not necessarily going to correspond to actual blocked or lost calls and thus requiring reporting on this basis would not be a useful aid for analyzing actual network outages. Further, because carriers may make alternate routing decisions without Syniverse’s knowledge, Syniverse would be unable to confirm whether changes that it may identify in MTP messages traveling across signaling links are truly associated with an outage. Again, requiring reporting in such events would not serve the Commission’s desire to be better informed about the vulnerabilities of the underlying networks, but would simply result in regular “false positive” reporting.

Section 4.9(e) does permit the use of historical load data in cases where third party providers cannot directly estimate the number of lost calls. Again, this type of reporting is not presently accomplished by third party SS7 providers to the degree of detail necessary to identify only call-related messaging. Moreover, it is simply not relevant for Syniverse to use such data when, for example, a mass call event (*e.g.* resulting from an “American Idol” program) or other anomalies existed on a network during a particular reporting period that would skew the data. Because Syniverse is not a carrier, and has no relationship to the end customer, Syniverse lacks the vision into the network necessary to know if there actually has been a reportable outage as

⁸ *Id.* at ¶149 n.418.

opposed to an explainable anomaly. Much like identifying blocked calls, Syniverse would not have the information required to make an accurate determination to report an outage based on historic load data. The carriers' singular ability to access information concerning its switches and call originations, combined with the coordination of Syniverse, will enable the carriers to fully report on an outage without a concurrent need for the FCC to obtain blocked or lost calls or MTP messages information from Syniverse and other third party SS7 providers.⁹

By contrast to the first two criteria for SS7 network reporting, the final element based on an STP isolation metric is precisely the type of outage-related detection that Syniverse is fully capable of reporting, and thus the only criteria that is likely to provide the Commission with the useful and accurate outage data it desires. Syniverse can readily comply with that portion of Section 4.9(e) that requires SS7 providers to report "whenever a pair of STPs serving any communications provider becomes isolated from a pair of interconnected STPs that serve any other communications providers, for at least 30 minutes duration." The outage criteria identified for isolated STP nodes could be applied to adjacent signaling end points as well. And unlike the other criteria, the occurrence of either type of isolation is indicative of an inability of carriers to transfer voice or data traffic outside of their own networks, which is readily detected by third party signaling providers. Use of these criteria also would more adequately identify issues with network diversity and reliability to the Commission.¹⁰

⁹ Syniverse notes that the *R&O* also cited to unfounded concerns that the Commission not "countenance any delay that could result from these coordination efforts or from any emerging contractual disputes among the parties with respect to their service agreements." *Id.* at ¶81. Syniverse submits that there is no basis in the record for the Commission to have any such concerns, nor would Syniverse expect to encounter any such delays or disputes with its customers.

¹⁰ In fact, a recent analysis conducted by Syniverse of SS7 network performance during 2004 revealed that of the total number of outages that would be reportable under the current criteria, only 16% would have been reportable events under the lost MTP messages guidelines. Thus, outage reporting based on isolations would result in much more comprehensive reporting to the Commission.

Accordingly, Syniverse strongly believes that, on reconsideration, the FCC will ultimately determine that the only criteria that should be imposed on third party SS7 network providers is based on isolation of STPs. A stay of the balance of Section 4.9(e) of the rules while the Petition for Reconsideration is pending, and subjecting SS7 network providers only to the STP isolation criteria in the interim, is therefore entirely appropriate.

II. SYNIVERSE WILL SUFFER IRREPARABLE INJURY ABSENT A STAY BECAUSE IT WOULD HAVE TO NEEDLESSLY INCUR EXPENSE IN CREATING A DATABASE OF HISTORIC CARRIED LOAD DATA.

As discussed above, Syniverse is likely to succeed on the merits in its forthcoming petition for reconsideration. Syniverse can readily report on outages based on isolation of STPs and signaling end points, and such reporting would provide the Commission with the most useful and reliable information related to service disruptions in light of the functions performed by SS7 providers.

Syniverse does not, however, have access to real-time call blockage data; this is simply not information that any of its carrier customers are obligated to provide or would likely provide for this purpose. Absent grant of the subject partial stay request, Syniverse will therefore be obligated to create and maintain a database of historic carried loads. To this end, Syniverse would have to complete its initial efforts to establish such a database at great cost and effort, as well as continue to maintain this data pending disposition of its Petition for Reconsideration. These are efforts which, Syniverse strongly believes, ultimately will be for naught, when on reconsideration the Commission modifies the reporting requirements for SS7 to remove the need to report based on historic carried load data. Accordingly, absent grant of a stay, Syniverse will be irreparably harmed by needlessly expending capital and manpower resources to create and maintain a database that ultimately will not be used.

III. NO SIGNIFICANT HARM TO THIRD PARTIES WILL RESULT FROM GRANT OF THE STAY.

The partial stay of the *R&O* requested herein would not pose any cognizable harm to third parties. Syniverse would still be required to report outages that are triggered by isolation of STPs and signaling end points, the most appropriate indicators of service disruptions for third party SS7 providers. And because Syniverse would be unable, despite its best efforts, to match the ability of carriers to develop an accurate and thus reliable database of historic carried load data, Syniverse may well report outages to the Commission that in fact should not have been triggered by the rules. Reporting based on historic carried load data amassed by a non-carrier such as Syniverse could lead to reporting of events that are due to unknown and undetected anomalies rather than an actual event outage. In sum, the Commission can grant the subject partial stay request and yet continue to receive the best possible outage reporting information from Syniverse.

IV. THE PUBLIC INTEREST FAVORS GRANT OF A PARTIAL STAY.

As stated above, absent grant of the requested stay, Syniverse would be required to needlessly engage in efforts to develop a database that, given its non-carrier role, would be prone to errors that only a company with the network vision and experience of a carrier could detect and account for. Accordingly, the public interest would be disserved by denying the stay, as it may lead to the reporting of events that are not in fact intended by the reporting criteria, and which would serve to confuse, rather than add, to the Commission's ability to use such information to improve the nation's communications infrastructure.

Furthermore, it is not in the public interest to needlessly require Syniverse to expend money and resources towards a regulatory effort that ultimately will not be upheld. Instead, a stay would forestall the expense and burdens that SS7 providers would face as a result of

premature implementation of the relevant portion of the *R&O* and rules adopted therein. At the same time, the Commission will be provided with meaningful data based on STP isolation which will allow it to determine whether these criteria will provide the agency and the public with the type of information required to meet its stated objectives.

CONCLUSION

For the reasons stated above, a stay is clearly warranted to Syniverse. Therefore, the Commission should issue a partial stay of enforcement of all but the last three sentences of Section 4.9(e) pending reconsideration of the *R&O*.

Respectfully submitted,

SYNIVERSE TECHNOLOGIES, INC.

By: /s/
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